



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,512	03/01/2004	Gang He	H0005273-1633	1068
7590	10/18/2005		EXAMINER	
Matthew S. Luxton Honeywell International Inc. 101 Columbia Road P.O. Box 2245 Morristown, NJ 07962			TWEEL JR, JOHN ALEXANDER	
			ART UNIT	PAPER NUMBER
			2636	
DATE MAILED: 10/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

(K)

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/790,512	HE, GANG
	Examiner	Art Unit
	John A. Tweel, Jr.	2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 30 August 2005.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-17 is/are allowed.
- 6) Claim(s) 18,21,22,27,29-31 and 33 is/are rejected.
- 7) Claim(s) 19,20,23-26,28,32 and 34-38 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 8/30/05.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

1. This Office action is in response to the Request for Continued Examination filed 8/30/05.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 18, 21, 22, 27, 29-31, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by **Doose et al** [U.S. 2004/0006412] (supplied by applicant).

For claim 18, the ground situational awareness system taught by **Doose** includes the following claimed subject matter, as noted, 1) the claimed database of runway and taxiway information is met by the airport map data store (No. 1611) and airport taxiway data store (No. 1612), 2) the claimed display for displaying maps is met by the display mentioned in the specification (Para. 28, Line 5) and seen in Figures 1-15, and 3) the claimed graphics generation computer is met by the airport taxiway navigation system that retrieves position and heading (Fig. 21), said system configuring the taxiway map

information and position and heading for the aircraft for displaying the aircraft position with respect to the runway and taxiways on the display.

For claim 21, Figures 1-15 of Doose displays the runways and taxiways for an airport in graphical map form.

For claim 22, Figures 1-15 of Doose also displays the runways and taxiways in different shades depending on type of taxiway and availability.

For claim 27, the system of Doose displays the taxiway labels on the display along with a position of the aircraft on the display.

For claim 29, the system of Doose re-updates the display based upon the heading and position of the aircraft.

For claim 30, the system of Doose retrieves position and heading information from the aircraft in displaying the aircraft at an estimated position and heading.

For claim 31, the system of Doose highlights the current and future taxiways based on a current aircraft position and heading.

For claim 33, the unit programmed to provide ground situational awareness taught by **Doose** includes the following claimed steps, as noted, 1) the claimed accessing a database is achieved using the airport map data store and airport taxiway data store, 2) the claimed receiving position and heading for the aircraft is achieved using the ATNS that retrieves position and heading data from the aircraft (Fig. 21), and 3) generating data which causes a display of maps is achieved using the display mentioned in the specification and seen in Figures 1-15.

5. Claims 1-17 are allowed.

6. Claims 19, 20, 23-26, 28, 32, and 34-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The system taught by Doose certainly depicts a system that displays the runways and taxiways in relation to the location of an aircraft; however, the particular properties found in the dependent claims are not easily found in an obvious combination in the prior art. Most important is the display resolution of the runway, taxiway, and aircraft position based upon at least one of a selected resolution, position and heading, taxi speed, and ground speed of the aircraft.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT  
10/14/05



JOHN TWEEL  
PRIMARY EXAMINER